

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for testing wire bonds in an integrated circuit package, comprising:
~~bonding an integrated circuit silicon die to a package substrate;~~
receiving a die comprising an integrated circuit formed on a semiconductor substrate;

forming a wire connection between a circuit contact pad in said integrated circuit ~~silicon die~~ and a lead contact pad in a said package substrate bonded to said semiconductor substrate; and

testing said wire connection for ~~detection of non-stick failure~~ by checking for electrical continuity along a path comprising said circuit contact pad and a non-stick detection (NSD) contact pad coupled to said semiconductor substrate, ~~with a testing device, wherein the silicon said semiconductor substrate of said integrated circuit itself provides electrical continuity for said non-stick detection between said circuit contact pad and a dedicated contact~~ said NSD contact pad for said testing. ~~pad in said package substrate which is electrically coupled to said testing device.~~

2. (Currently Amended) A method as described in Claim 1, wherein said ~~bonding~~ said integrated circuit die is bonded to said a package substrate is ~~performed~~ using electrically conductive epoxy.

3. (Currently Amended) A method as described in Claim 1, wherein said ~~bonding~~ said integrated circuit die is bonded to said package substrate ~~is performed~~ using non-electrically conductive epoxy.

4. (Currently Amended) A method as described in Claim 1, wherein said lead contact pad ~~in said package substrate~~ is electrically isolated from other lead contact pads in said package substrate.

Claims 5-7 (Canceled).

8. (Currently Amended) A method as described in Claim 1, wherein said method is performed recursively for a plurality of ~~said~~ wire connections.

Claims 9-37. (Canceled).

38. (New) A method for testing wire bonds in an integrated circuit package, comprising:

receiving a die comprising an integrated circuit formed on a semiconductor substrate;

connecting one end of a wire to a circuit contact pad in said integrated circuit; and

testing for non-stick failure of said wire to said circuit contact pad by checking for electrical continuity along a path comprising said circuit contact pad and a non-stick detection (NSD) contact pad coupled to said semiconductor substrate, wherein said semiconductor substrate provides electrical continuity between said circuit contact pad and said NSD contact pad for said testing.

39. (New) A method as described in Claim 38, wherein said integrated circuit die is bonded to a package substrate.

40. (New) A method as described in Claim 39, wherein said NSD contact pad extends through said package substrate and is coupled via a trace line to a bus line that is coupled to a grounded mold gate, wherein said path for checking electrical continuity further comprises said trace line, said bus line and said mold gate.

41. (New) The method of Claim 38, wherein said wire is fed from a wire spool and wherein said path for checking electrical continuity further comprises said wire and said wire spool.

42. (New) A method for testing wire bonds in an integrated circuit package, comprising:

connecting the first end of a length of a wire fed from a wire spool to a circuit contact pad in an integrated circuit formed on a semiconductor substrate; and

testing said connecting of said first end of said wire to said circuit contact pad for non-stick failure by checking for electrical continuity on a path comprising, in order, said wire spool, said length of wire, said circuit contact pad, said semiconductor substrate, and a non-stick detection (NSD) contact pad coupled to said semiconductor substrate, wherein said semiconductor substrate provides electrical continuity between said circuit contact pad and said NSD contact pad for said testing, wherein non-stick failure at said first end is indicated if said electrical continuity does not exist.

43. (New) A method as described in Claim 42, wherein said semiconductor substrate is bonded to a package substrate.

44. (New) A method as described in Claim 43 wherein said NSD contact pad extends through said package substrate and is coupled via a trace line to a bus line that is coupled to a grounded mold gate, wherein said path for checking electrical continuity further comprises said trace line, said bus line and said mold gate.

45. (New) A method as described in Claim 43, further comprising:
connecting the second end of said length of wire to a lead contact pad in said package substrate, wherein successful connection of said second end to said lead contact pad causes said length of wire to separate from said wire spool; and
testing connection of said second end to said lead contact pad for non-stick failure by checking for electrical continuity along said path, wherein non-stick failure at said second end is indicated if electrical continuity exists.